

CLAIMS

1. A method, comprising:
receiving a request to switch from a current network context to a new
network context; and
switching from the current network context to the new network context
without process shutdown.

2. The method as recited in claim 1, wherein process shutdown includes
terminating a user session utilizing the current network context and logging into a
user session utilizing the new network context.

3. The method as recited in claim 1, wherein the current network
context includes web page data specific to a user, and wherein the web page data
is stored in a memory location based on a hash of a universal resource locator
(URL) for the web page.

1 4. The method as recited in claim 1, wherein:
2 the current network context is associated with a current globally unique
3 user identifier (guid);

4 the receiving a request to switch from the current network context to a new
5 network context further comprises receiving a new guid with a request to switch to
6 a new network context associated with the new guid; and

7 the switching from the current network context further comprises switching
8 from the current network context to a new network context that is associated with
9 the new guid.

10
11 5. The method as recited in claim 4, wherein the switching further
12 comprises:

13 setting one or more global pointers to reference one or more directories
14 uniquely associated with the new guid.

15
16 6. The method as recited in claim 5, wherein the new network context
17 includes shared web page data, and wherein the web page data is stored in a
18 location based on a hash of a universal resource locator (URL) for the web page.

19
20 7. The method as recited in claim 5, wherein the new network context
21 includes web page data specific to a user, and wherein the web page data is stored
22 in a location based on a hash of a combination of the new guid and a universal
23 resource locator (URL) for the web page.

1
2 **8.** The method as recited in claim 4, wherein the switching to a new
3 network content further comprises:

4 storing the current network context in a directory uniquely associated with
5 the current guid.

6
7 **9.** The method as recited in claim 1, wherein the current network
8 context is a current Internet context and the new network context is a new Internet
9 context.

10
11 **10.** The method as recited in claim 1, further comprising:
12 determining if the new network context is valid; and
13 switching network contexts only if the new network context is valid.

14
15 **11.** The method as recited in claim 1, wherein switching network
16 contexts further comprises switching universal resource locator (URL) cache
17 components from current URL cache components to new URL cache components.

18
19 **12.** The method as recited in claim 1, wherein the new network context
20 is a default network context.

21
22 **13.** The method as recited in claim 1, wherein a network context
23 comprises a set of objects, one object for each network state.

1
2 **19.** The method as recited in claim 18, wherein the setting one or more
3 global pointers further comprises:

4 identifying the new web page content as being user-specific;

5 determining a globally unique identifier (guid) associated with the new
6 Internet context;

7 determining a value associated with the guid;

8 hashing a combination of the URL and the value associated with the guid;

9 setting the one or more global pointers to the new web page content in a
10 memory location associated with the hash value derived from hashing the
11 combination of the URL and the value associated with the guid.
12

13 **20.** The method as recited in claim 19, wherein the value associated
14 with the guid is an ordinal.
15

16 **21.** A computer-readable medium having computer-executable
17 instructions that, when executed by a computer, perform the following steps:

18 receiving a request to switch from a first Internet context associated with a
19 first identity to a second Internet context associated with a second identity;

20 halting operations utilizing the first Internet context; and

21 initializing operations utilizing the second Internet context without
22 requiring a process shutdown.
23
24
25

1 **22.** The computer-readable medium as recited in claim 21, wherein the
2 halting operations utilizing the first Internet context includes storing first Internet
3 context data in one or more containers associated with the first identity.
4

5 **23.** The computer-readable medium as recited in claim 21, wherein the
6 initializing operations utilizing the second identity includes setting one or more
7 global pointers to Internet context data associated with the second identity that is
8 stored in one or more containers associated with the second identity.
9

10 **24.** The computer-readable medium as recited in claim 21, wherein the
11 initializing operations utilizing the second identity includes setting one or more
12 global pointers to reference default Internet context data and associating the
13 Internet context data with the second identity.
14
15
16
17
18
19
20
21
22
23
24
25

25. An Internet management object stored on a computer-readable medium, comprising computer-executable instructions that, when executed on a computer, perform the following steps:

storing the first Internet context in one or more containers associated with the first identity;

26. The Internet management object as recited in claim 25, further comprising computer-executable instructions to perform the following steps:

if the second identity has not been utilized previously, creating a new Internet context and setting one or more global pointers to reference the new Internet context stored in new containers and associating the new Internet context with the second identity.

1 **28.** The Internet management object as recited in claim 27, wherein the
2 first Internet content is shared content.

3
4 **29.** The Internet management object as recited in claim 25, wherein the
5 first Internet context includes first Internet content stored in a memory location
6 and identified in an index record, the index record being identified according to a
7 hash value of a URL associated with the first Internet content and a value uniquely
8 associated with the first identity.

9
10 **30.** The Internet management object as recited in claim 29, wherein the
11 first Internet content is user-specific content.

12
13 **31.** A computer system, comprising:
14 a registry that includes one or more global pointers that reference one or
15 more containers that store a first Internet context and a second Internet context;
16 an Internet management component that associates a first identifier with the
17 first Internet context and a second identifier with the second Internet context;
18 wherein the Internet management component is configured to halt
19 processing of the first Internet context and initialize processing by the second
20 Internet context without shutting down other processes when it receives a request
21 to switch from the first identity to the second identity.

1 **32.** The computer system as recited in claim 31, wherein:

2 the first Internet context includes first Internet content from a first web page
3 having a first universal resource locator (URL);

4 one of the global pointers references a first memory location derived by
5 hashing the first URL; and

6 the Internet management component is further configured to store the first
7 Internet context data in a container referenced by the global pointer that references
8 the first memory location.

9
10 **33.** The computer system as recited in claim 31, wherein:

11 the first Internet context includes first Internet content from a first web page
12 having a first universal resource locator (URL);

13 the first identity is associated with a unique value;

14 one of the global pointers references a first identity memory location
15 derived by hashing a combination of the first URL and the unique value; and

16 the Internet management component is further configured to store the first
17 Internet context data in a container referenced by the global pointer that references
18 the first identity memory location.

1 **34.** The computer system as recited in claim 31, wherein:
2 the second Internet context includes second Internet content from a second
3 web page having a second universal resource locator (URL);
4 one of the global pointers references a second memory location derived by
5 hashing the second URL; and
6 the Internet management component is further configured to set the global
7 pointer to reference the second memory location.

9 **35.** The computer system as recited in claim 31, wherein:
10 the second Internet context includes second Internet content from a second
11 web page having a second universal resource locator (URL);
12 the second identity is associated with a second unique value;
13 one of the global pointers references a second identity memory location
14 derived by hashing a combination of the second URL and the second unique
15 value; and
16 the Internet management component is further configured to set the global
17 pointer to reference the second identity memory location.

18
19 add
20 A1
21 7